

I Claim:

1. A method for electronically identifying a vehicle wheel on-the-fly moving downstream from one processing location to another, said method comprising the steps of:

(a) as the vehicle wheel moves downstream, locating a machine-readable identification mark applied to an exposed surface of the vehicle wheel; and

(b) electronically reading the identification mark on-the-fly.

2. A wheel identification method according to claim 1, and comprising a first stage reading operation for locating the machine-readable identification mark on the moving vehicle wheel.

3. A wheel identification method according to claim 2, and comprising a second stage reading operation downstream of said first stage reading operation for electronically reading the identification mark on the moving vehicle wheel.

4. A wheel identification method according to claim 3, wherein the second stage reading operation comprises mounting multiple ID scanners at predetermined locations relative to the moving vehicle wheel.

5. A wheel identification method according to claim 3, wherein the second stage reading operation comprises mounting a single ID scanner at a predetermined location relative to the moving vehicle wheel.

6. A wheel identification method according to claim 5, and comprising adjusting the location of the ID scanner relative to the moving vehicle wheel, such that the scanner intercepts the identification mark applied to the vehicle wheel.

7. A wheel identification method according to claim 3, and comprising rotating the vehicle wheel between the first and second stage reading operations, such that the identification mark is oriented for interception by the ID scanner.

8. A wheel identification method according to claim 1, and comprising locating at least one of multiple machine-readable identification marks applied to a circumference of the vehicle wheel.
9. A wheel identification method according to claim 8, wherein the vehicle wheel comprises at least three circumferentially-spaced, machine-readable identification marks.
10. A wheel identification method according to claim 9, wherein the identification marks are applied to a rim barrel of the vehicle wheel.
11. A wheel identification method according to claim 9, wherein the identification marks are applied to a rim flange of the vehicle wheel.

12. A wheel identification system for electronically identifying a vehicle wheel on-the-fly moving downstream from one processing location to another, said system comprising:

- (a) means for locating a machine-readable identification mark applied to an exposed surface of the vehicle wheel; and
- (b) at least one ID scanner for electronically reading the identification mark on-the-fly as the vehicle wheel moves downstream.

13. A wheel identification system according to claim 12, wherein said means for locating the identification mark comprises a camera mounted upstream of said at least one ID scanner.

14. A wheel identification system according to claim 12, and comprising means for adjusting the location of said at least one ID scanner relative to the moving vehicle wheel, such that said ID scanner intercepts the identification mark applied to the vehicle wheel.

15. A wheel identification system according to claim 12, and comprising means located upstream of said at least one ID scanner for rotating the vehicle wheel, such that the identification mark is oriented for interception by the ID scanner.

16. A wheel identification system according to claim 12, and comprising multiple ID scanners mounted at predetermined locations relative to the moving vehicle wheel.